Follow-along guide: Craft compelling stories with Tableau

This document includes detailed instructions for how to perform the data visualizations described in the video “Craft compelling stories with Tableau.”

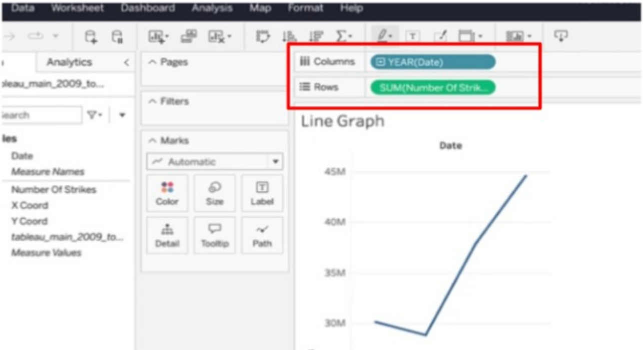
The following guide points out areas of the video that may require adjustment. These resource guides can also serve as a set of usability reminders for you to recall when using Tableau in your future career.

Instructions

- Go to https://public.tableau.com/s/
- Since you’ve already set up your Tableau Public profile, all you need to do is log in and select **Web Authoring** under **Create** in the navigation bar.
- Select the appropriate CSV file provided in the instructions. The dataset you’ll use with this instructional video is: tableau_main_2009_to_2018.csv.
    - Please be aware that when you download the zip file folder provided, the computer automatically names that zip file folder with a long string of numbers and letters. You have to open that folder and then upload the individual files that are named correctly and match what's shown in the video.
- Click on NEW WORKSHEET.

Note: Please allow several minutes for data import into a new worksheet.

- Move the blue Date field to the column field.
- Select YEAR from dropdown.
- Move NUMBER OF STRIKES to the row field.


Data
Worksheet
Dashboard
Analysis
Map
Format
Help
Analytics
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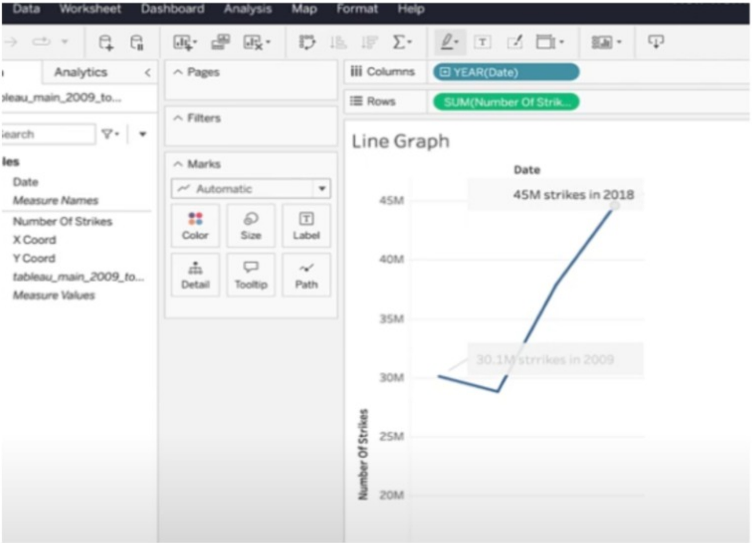
Date
Measure Names
Number Of Strikes
X Coord
Y Coord
tableau_main_2009_to...
Measure Values
Pages
Filters
Marks
Automatic
Color
Size
Label
Detail
Tooltip
Path
Line Graph
Date
45M
40M
35M
30M

Columns YEAR(Date)

Rows SUM(Number Of Strik...

Number Of Strikes
25M
20M

- If your visualization doesn't default to a line graph, click on "SHOW ME" in the upper right of the screen and select Lines (discrete).
- Create annotation by **right clicking** on each end of the line and selecting "Annotate mark."
- Type in "30.1M" for the Number of Strikes.
- Create annotation on the final mark in the same way.
- Type "45M" for number of strikes in 2018.


Data
Worksheet
Dashboard
Analysis
Map
Format
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Analytics
Pages
Filters
Marks
Automatic
Color
Size
Label
Detail
Tooltip
Path
Date
Measure Names
Number Of Strikes
X Coord
Y Coord
tableau_main_2009_to...
Measure Values
Line Graph
Date
45M
40M
35M
30M
25M
20M
Number Of Strikes

Columns: YEAR(Date)

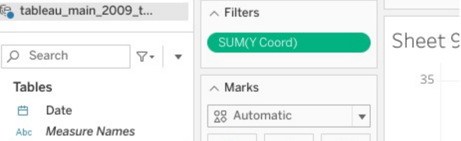
Rows: SUM(Number Of Strik...

45M strikes in 2018

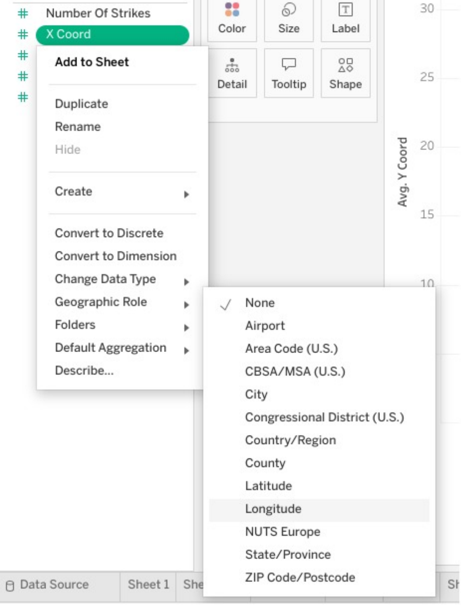
30.1M strrikes in 2009

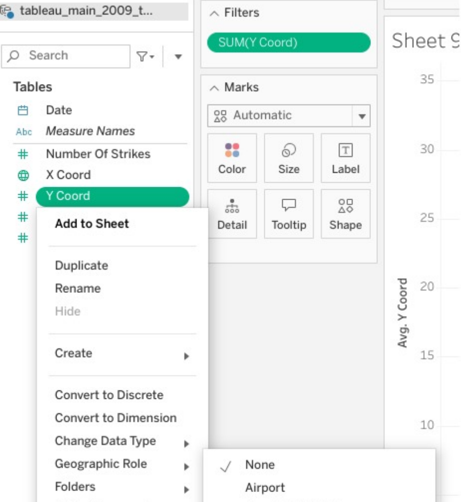
- Click on NEW WORKSHEET.
- Drag the X-coord to the column field. Drag the Y-coord to the Row field.

Note: Make sure the X and Y coordinates are continuous dimensions with Y coord geographic role set to latitude and X coord geographic role set to longitude.


tableau_main_2009_t...
Search
Tables
Date
Measure Names
Filters
Marks
Automatic
Sheet 9
35

Filters: SUM(Y Coord)


Number Of Strikes
X Coord
Add to Sheet
Duplicate
Rename
Hide
Create
Convert to Discrete
Convert to Dimension
Change Data Type
Geographic Role
Folders
Default Aggregation
Describe...
Color
Size
Label
Detail
Tooltip
Shape
30
25
20
15
10
Avg. Y Coord
None
Airport
Area Code (U.S.)
CBSA/MSA (U.S.)
City
Congressional District (U.S.)
Country/Region
County
Latitude
Longitude
NUTS Europe
State/Province
ZIP Code/Postcode
Data Source
Sheet 1


tableau_main_2009_t...
Search
Tables
Date
Measure Names
Number Of Strikes
X Coord
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Add to Sheet
Duplicate
Rename
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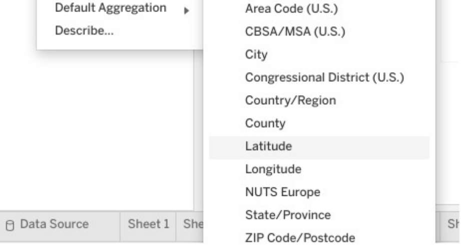
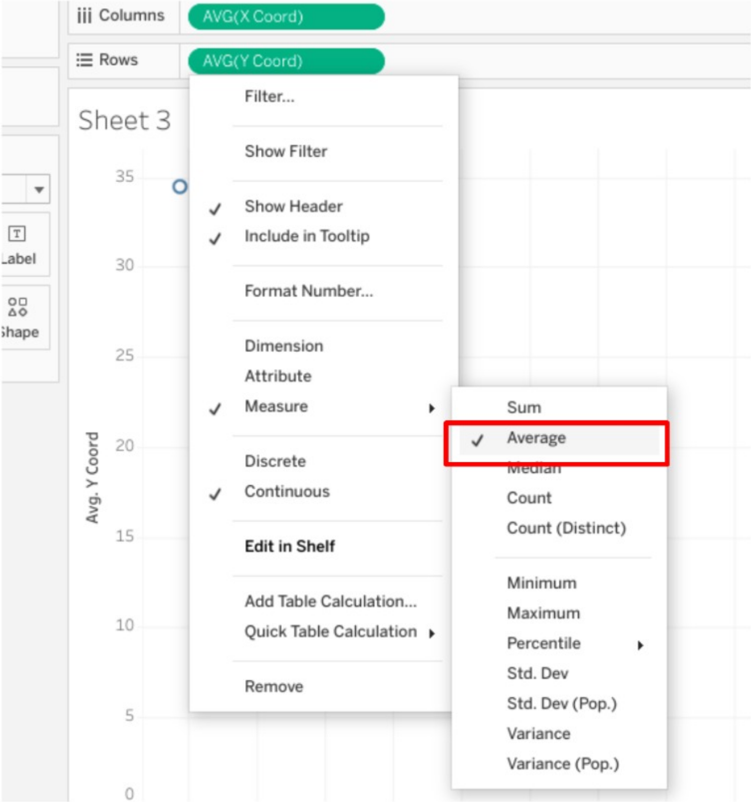
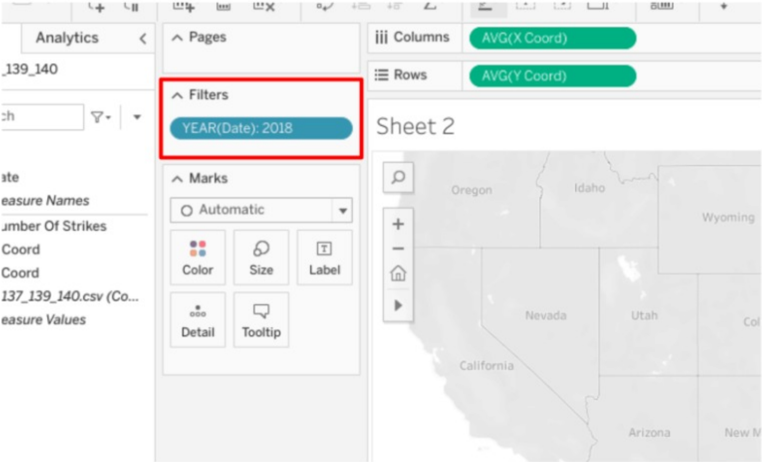
Create
Convert to Discrete
Convert to Dimension
Change Data Type
Geographic Role
Folders
Filters
SUM(Y Coord)
Marks
Automatic
Color
Size
Label
Detail
Tooltip
Shape
35
30
25
20
15
10
Avg. Y Coord
None
Airport


Default Aggregation
Describe...
Area Code (U.S.)
CBSA/MSA (U.S.)
City
Congressional District (U.S.)
Country/Region
County
Latitude
Longitude
NUTS Europe
State/Province
ZIP Code/Postcode
Data Source
Sheet 1
She
Sh

- Click on the dropdown for both the X and Y coordinates.
- Select MEASURE then AVERAGE.


Columns
AVG(X Coord)
Rows
AVG(Y Coord)
Sheet 3
Label
Shape
Avg. Y Coord
35
30
25
20
15
10
5
0
Filter...
Show Filter
✓ Show Header
✓ Include in Tooltip
Format Number...
Dimension
Attribute
✓ Measure
Discrete
✓ Continuous
Edit in Shelf
Add Table Calculation...
Quick Table Calculation
Remove
Sum
✓ Average
Median
Count
Count (Distinct)
Minimum
Maximum
Percentile
Std. Dev
Std. Dev (Pop.)
Variance
Variance (Pop.)

- Drag DATE to filter field.


Analytics
_139_140
Pages
Filters
YEAR(Date): 2018
Marks
Automatic
Color
Size
Label
Detail
Tooltip
iii Columns
AVG(X Coord)
Rows
AVG(Y Coord)
Sheet 2
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umber Of Strikes
Coord
Coord
137_139_140.csv (Co...
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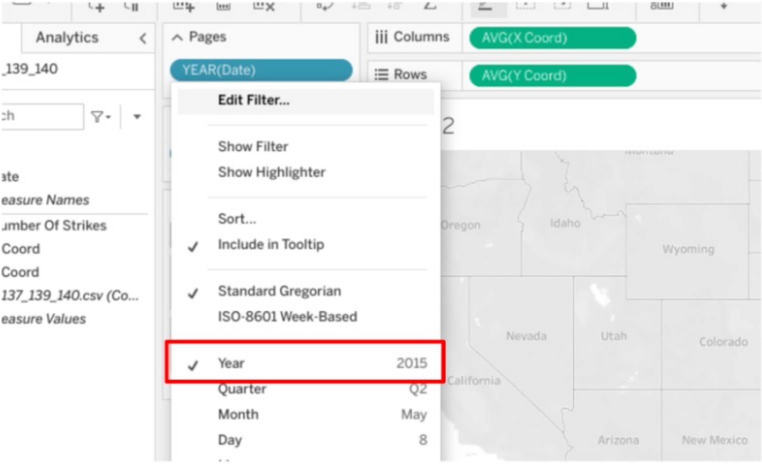
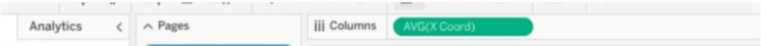
Oregon
Idaho
Wyoming
Nevada
Utah
California
Arizona

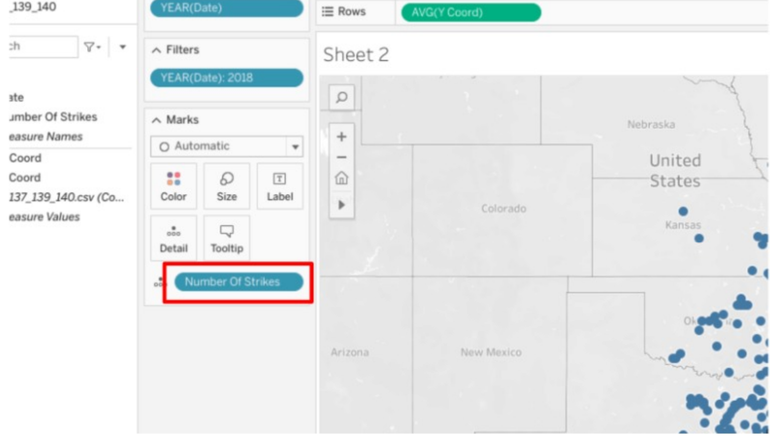
- Drag DATE to pages field, select year from dropdown.


Analytics
_139_140
Pages
YEAR(Date)
iii Columns
AVG(X Coord)
Rows
AVG(Y Coord)
Edit Filter...
Show Filter
Show Highlighter
Sort...
✓ Include in Tooltip
✓ Standard Gregorian
ISO-8601 Week-Based
✓ Year 2015
Quarter Q2
Month May
Day 8
ate
easure Names
umber Of Strikes
Coord
Coord
137_139_140.csv (Co...
easure Values
Oregon
Idaho
Wyoming
Nevada
Utah
Colorado
California
Arizona
New Mexico

- Drag NUMBER of STRIKES to the detail field.

Note: Be sure to click the dropdown on “Number of Strikes” and convert it to a dimension.


Analytics
Pages
iii Columns
AVG(X Coord)


_139_140
YEAR(Date)
Rows
AVG(Y Coord)
Filters
YEAR(Date): 2018
Marks
Automatic
Color
Size
Label
Detail
Tooltip
Number Of Strikes
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umber Of Strikes
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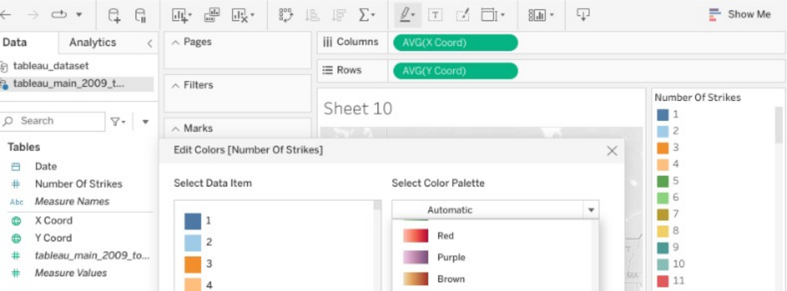
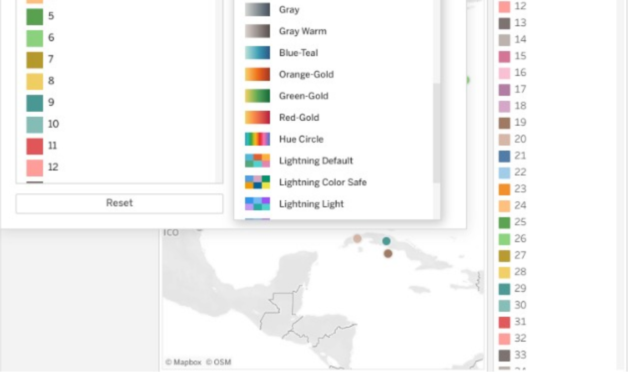
Coord
Coord
137_139_140.csv (Co...
easure Values
Sheet 2
Nebraska
United States
Kansas
Colorado
Arizona
New Mexico

- Click on NEW WORKSHEET.
- Drag the X-coord to the column field. Drag the Y-coord to the Row field.
- Drag the Number of Strikes measure to the detail field.
- **Note:** Make sure the Number of Strikes measure is Discrete. To do so, right click Number of Strikes measure and click "Convert to Discrete."
- Add Number of Strikes to the color field and make the color coincide with the number of strikes. Select Red-Gold under "Automatic" drop down.


Show Me
Data
Analytics
Pages
Columns
AVG(X Coord)
Rows
AVG(Y Coord)
tableau_dataset
tableau_main_2009_t...
Filters
Search
Marks
Tables
Date
Number Of Strikes
Measure Names
X Coord
Y Coord
tableau_main_2009_to...
Measure Values
Sheet 10
Number Of Strikes
1
2
3
4
5
6
7
8
9
10
11
Edit Colors [Number Of Strikes]
Select Data Item
1
2
3
4
Select Color Palette
Automatic
Red
Purple
Brown


5
6
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9
10
11
12
Reset
Gray
Gray Warm
Blue-Teal
Orange-Gold
Green-Gold
Red-Gold
Hue Circle
Lightning Default
Lightning Color Safe
Lightning Light
© Mapbox © OSM
12
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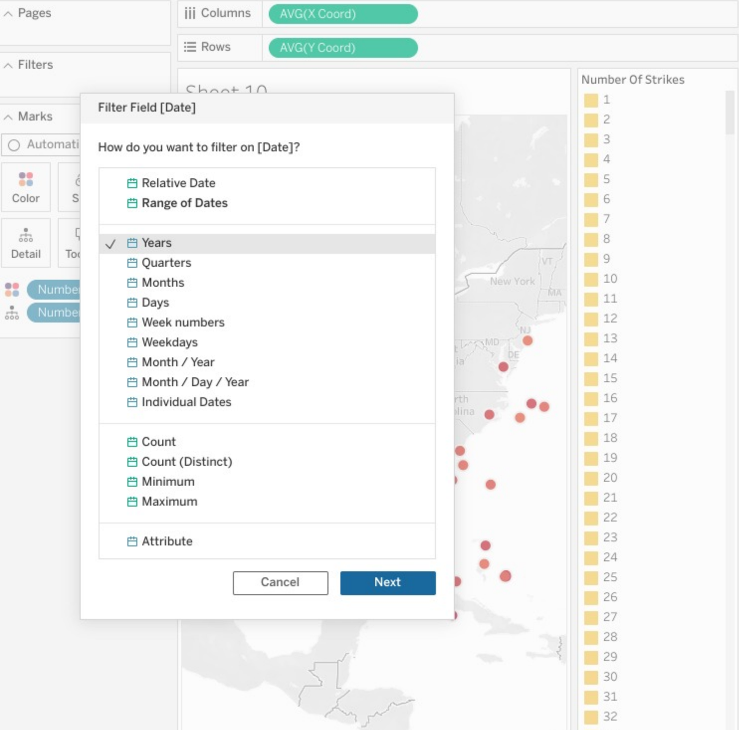
33

- Drop Date into the Filters field and select Year.


Pages
Columns
AVG(X Coord)
Rows
AVG(Y Coord)
Filters
Sheet 10
Marks
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Color
Detail
Numbe
Numbe
Filter Field [Date]
How do you want to filter on [Date]?
Relative Date
Range of Dates
✓ Years
Quarters
Months
Days
Week numbers
Weekdays
Month / Year
Month / Day / Year
Individual Dates
Count
Count (Distinct)
Minimum
Maximum
Attribute
Cancel
Next
New York
VT
MA
NJ
MD
DE
Number Of Strikes
1
2
3
4
5
6
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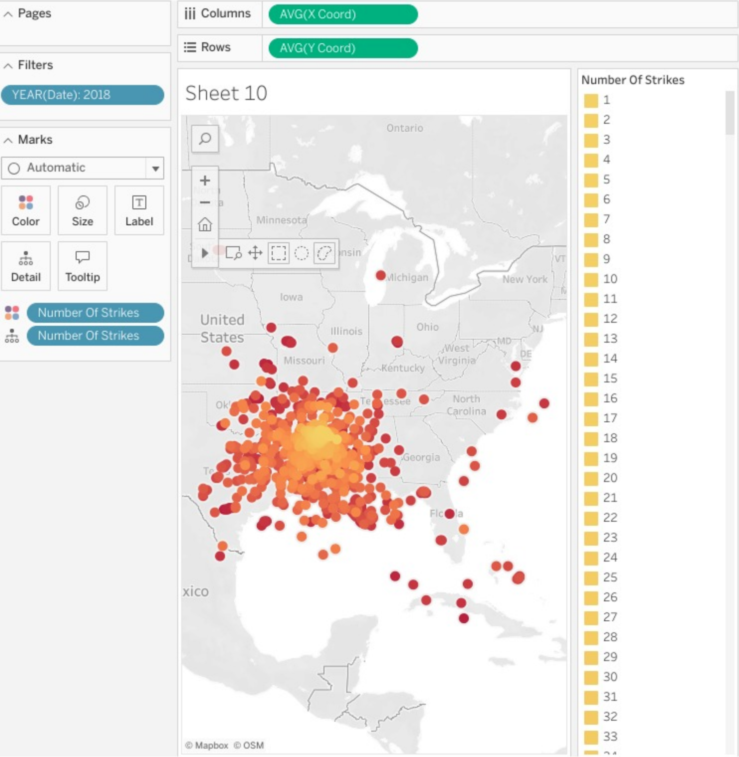
29
30
31
32

© Mapbox © OSM
33

- Use the lasso tool. To do so, hover your cursor over your geographic map visualization and a small line of graphics will appear on the left side. Hover over the right arrow then click on the lasso image.


Columns: AVG(X Coord)

Rows: AVG(Y Coord)

Filters: YEAR(Date): 2018

Marks: Automatic

Color: Number Of Strikes

Detail: Number Of Strikes

Pages
Color
Size
Label
Detail
Tooltip
Sheet 10
Ontario
Minnesota
Michigan
New York
Iowa
United States
Illinois
Ohio
Missouri
Kentucky
West Virginia
MD
NJ
DE
VT
Tennessee
North Carolina
Georgia
Florida
Texas
xico
© Mapbox © OSM
Number Of Strikes
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
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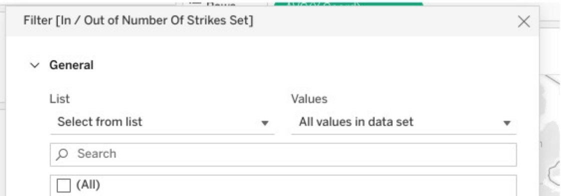
32
33

- Drag your cursor over the Texas state border, select Keep Only then click Create Set.
- Drag your new set to the Filters field and select ‘In’ from Filter.


Filter [In / Out of Number Of Strikes Set]

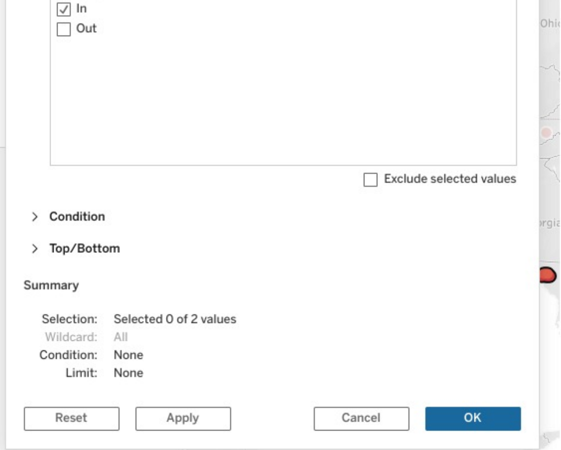
General

List: Select from list

Values: All values in data set

Search

☐ (All)



☑ In
☐ Out

☐ Exclude selected values

› Condition

› Top/Bottom

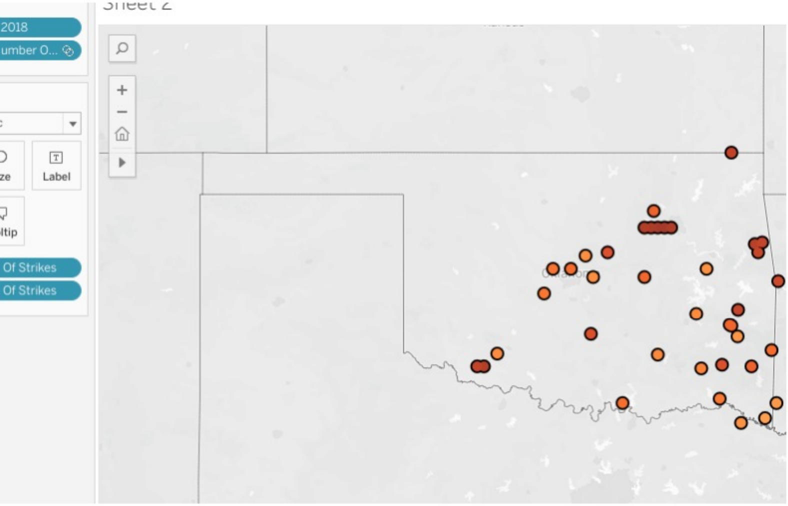
Summary

Selection: Selected 0 of 2 values
Wildcard: All
Condition: None
Limit: None

Reset
Apply
Cancel
OK
Ohi
rgia

- **Note:** The dashboards section shown in the final part of this instructional video should be completed on your own. It is up to you to design the Oklahoma and Kansas visualizations by following the same steps as performed for Texas in the video. For detailed instructions to create the on-screen visuals shown in the remainder of this video, please follow the proceeding steps.

- Create two duplicates of this sheet and redo the same tracing of states process, but for Oklahoma and Kansas.



Sheet 2
2018
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Label
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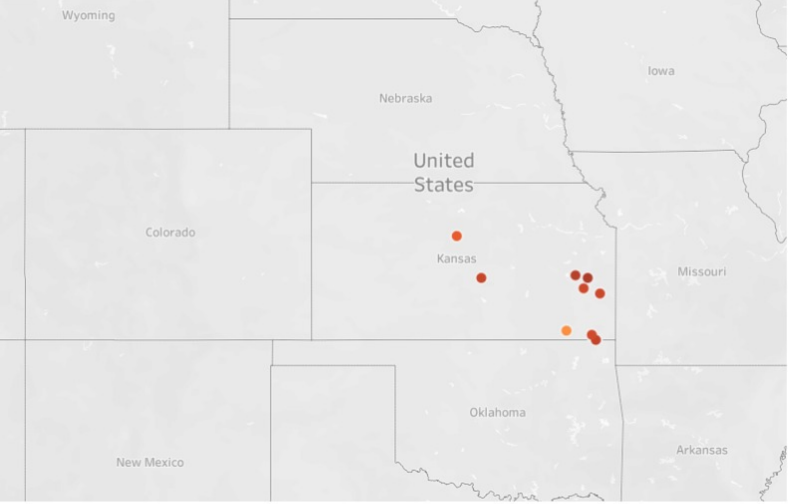
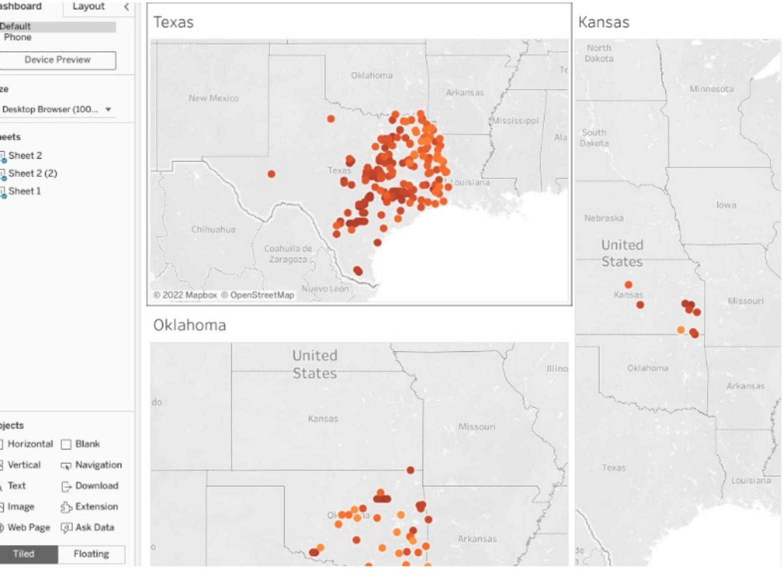
Of Strikes
Of Strikes
Oklahoma


Wyoming
Nebraska
Iowa
United States
Colorado
Kansas
Missouri
Oklahoma
New Mexico
Arkansas

- Click on “New Dashboard” at bottom of page.

- In the dashboard, embed the three state worksheets.


ashboard
Layout
Default
Phone
Device Preview
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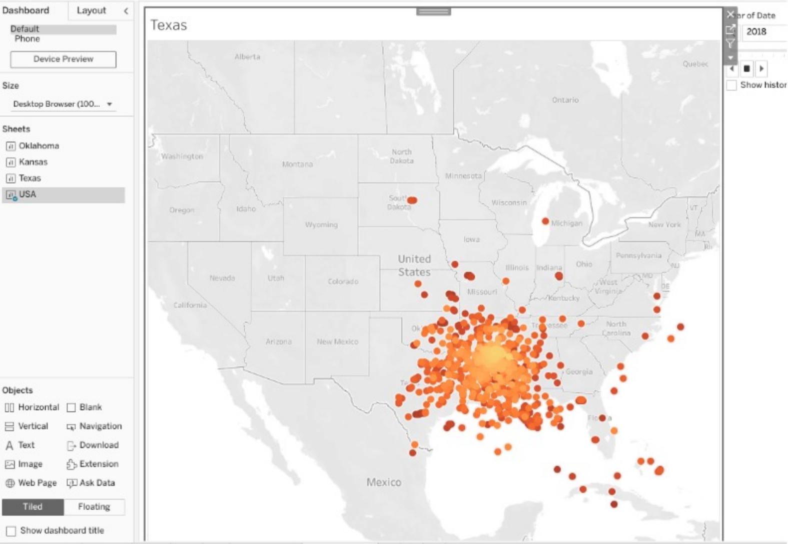
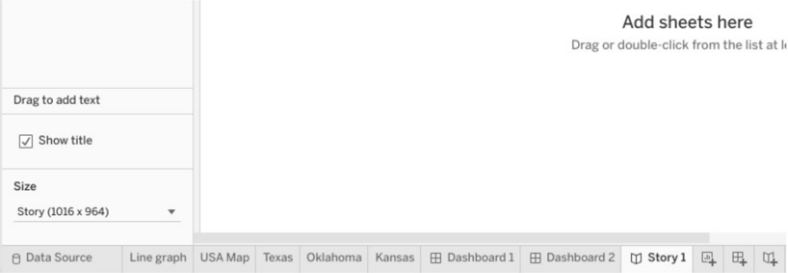
Desktop Browser (100...
eets
Sheet 2
Sheet 2 (2)
Sheet 1
jects
Horizontal
Blank
Vertical
Navigation
Text
Download
Image
Extension
Web Page
Ask Data
Tiled
Floating
Texas
Oklahoma
Arkansas
New Mexico
Mississippi
Ala
Texas
Louisiana
Chihuahua
Coahuila de Zaragoza
Nuevo León
© 2022 Mapbox © OpenStreetMap
Kansas
North Dakota
Minnesota
South Dakota
Iowa
Nebraska
United States
Kansas
Missouri
Oklahoma
Arkansas
Texas
Louisiana
Oklahoma
United States
Illino
Kansas
Missouri
Arkansas

- Create another dashboard.
- Place USA map in it.

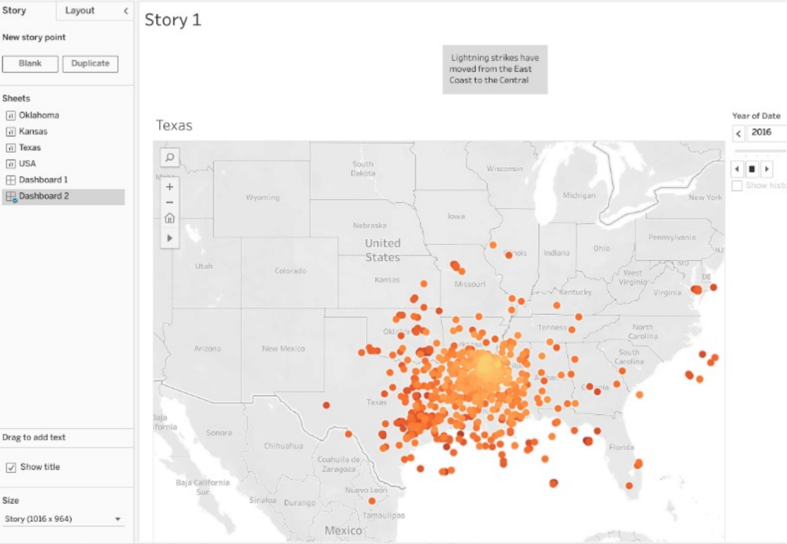

Dashboard
Layout
Default
Phone
Device Preview
Size
Desktop Browser (100...
Sheets
Oklahoma
Kansas
Texas
USA
Objects
Horizontal
Blank
Vertical
Navigation
Text
Download
Image
Extension
Web Page
Ask Data
Tiled
Floating
Show dashboard title
Texas
ar of Date
2018
Show histor
Alberta
Quebec
Ontario
Washington
Montana
North Dakota
Minnesota
South Dakota
Wisconsin
Michigan
Oregon
Idaho
Wyoming
Iowa
New York
United States
Pennsylvania
Nevada
Utah
Colorado
Illinois
Indiana
Ohio
Missouri
West Virginia
Kentucky
California
Tennessee
North Carolina
Arizona
New Mexico
Georgia
Florida
Mexico

- Create a new STORY at the bottom of the Tableau page.


Add sheets here
Drag or double-click from the list at l
Drag to add text
Show title
Size
Story (1016 x 964)
Data Source
Line graph
USA Map
Texas
Oklahoma
Kansas
Dashboard 1
Dashboard 2
Story 1

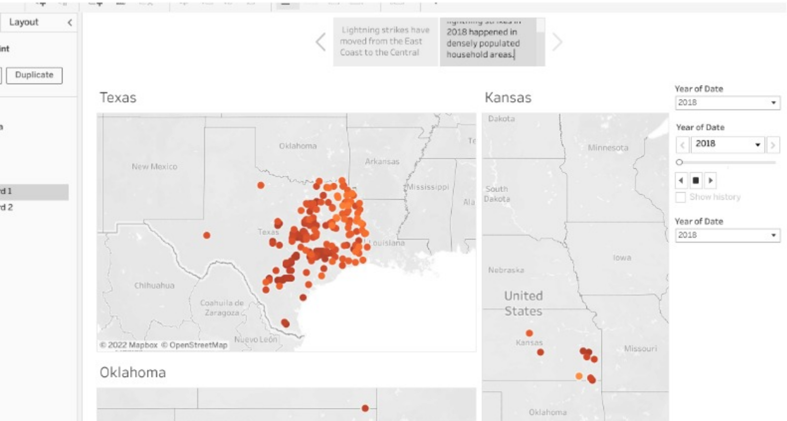
- On the first page, select the line graph dashboard.
- Fill in the caption with “Lightning strikes in the U.S. have increased 50% over the last decade.”
- Go to page 2 of the story.
- Select USA dashboard for Page 2.
- In caption type, “Lightning strikes have moved from the East Coast to the Central Mainlands over the last

decade.”


Story
Layout
New story point
Blank
Duplicate
Sheets
Oklahoma
Kansas
Texas
USA
Dashboard 1
Dashboard 2
Drag to add text
☑ Show title
Size
Story (1016 x 964)
Story 1
Texas
Year of Date
2016
☐ Show hist

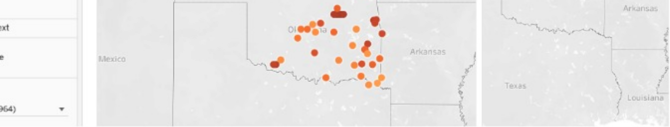
Lightning strikes have moved from the East Coast to the Central

- Go to page 3 of Story.
- Select the last dashboard with three states on it.
- In caption type, “Most number of lightning strikes in 2018 happened in densely populated household areas.”
- And now you’ve created a story using dashboards and worksheets as building blocks!


Layout
Duplicate
Texas
Kansas
Oklahoma
Year of Date
2018
Year of Date
2018
☐ Show history
Year of Date
2018
© 2022 Mapbox © OpenStreetMap

Lightning strikes have moved from the East Coast to the Central

2018 happened in densely populated household areas.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964)
Mexico
Ol a
Arkansas
Arkansas
Texas
Louisiana

-

Mark as completed

Like Dislike Report an issue